

## Antidepressant as well as antirheumatic activity is demonstrated by ademetionine

Ademetionine has been shown to have increasing clinical utility in rheumatology and neuropsychiatry. It is a metabolite found in many mammalian tissues and is the most important methyl donor. When ademetionine is prepared as the stable p-toluene-sulfonate complex of its sulfate salt, it may be administered parenterally or as enteric coated tablets (although oral bioavailability is limited).

Trials comparing IV ademetionine with IV tricyclic antidepressants have demonstrated similar efficacy in patients with depression. However, many trials involved heterogeneous groups of patients with varying degrees of disease severity. In addition, dose-response data are not available for ademetionine or most tricyclics when administered by the IV route. It has been suggested by several reports that ademetionine has a rapid onset of action, sometimes within the first week of treatment. However, in trials where this was noted, the response to tricyclics was often rapid also. In manic depressive patients, mood switchings from depression to hypomania have been frequently seen soon after initiation of ademetionine treatment.

Trials with ademetionine in depressed patients have shown it to be free from side effects, except for a few reports of anxiety. This has been confirmed in thousands of patients with arthritis treated with high dose oral ademetionine, where mild upper gastrointestinal symptoms were the most frequent side effect.

Animal studies originally indicated that the mechanism of action of ademetionine was dissimilar to that of imipramine-like antidepressants. Recent studies in humans, however, have shown increases in cerebrospinal fluid levels of monoamine metabolites including 5-hydroxyindoleacetic and homovanillic acids.

Hence, if oral administration of ademetionine can be shown to have mood-elevating effects, then '**... it might be an unusually attractive substance for the treatment of depression as well as arthritis or other disorders in elderly patients who commonly have coexisting somatic and depressive symptoms**'.

Baldessarini RJ American Journal of Medicine 83 (Suppl 5A) 95-103. 20 Nov 1987